Sequence Listing could not be accepted due to errors.

See attached Validation Report.

If you need help call the Patent Electronic Business Center at (866)

217-9197 (toll free).

Reviewer: Anne Corrigan

Timestamp: [year=2008; month=7; day=11; hr=14; min=27; sec=24; ms=843; ]

\_\_\_\_\_\_

\*\*\*\*\*\*\*\*\*\*\*\*

Reviewer Comments:

1

SEQUENCE LISTING

Please remove the "1" which appears at the beginning of the submitted sequence listing.

<210> 1

<211> 20

<212> DNA

<213> Artificial sequence

<220>

<223> Synthetic oligonucleotide

<400> 1

atggaaggtc cagtgttctc

Please insert a cumulative nucleotide total at the right margin of each nucleotide line. This error appears in most of the sequences in the submitted file.

<210> 3

<211> 20

<212> DNA

<213> Artificial sequence

<220>

<223> Synthetic oligonucleotide

20

```
20
<400> 3
2
20
15
tccataacgt tcctgatgct
Please remove the "stray" numbers appearing between the <223> line and
the <400> line; and between the <400> line and the nucleotides.
type of error appears in many of the sequences. Please insert a
cumulative nucleotide total at the right margin of the nucleotide line.
<210> 4
<211> 15
<212> DNA
<213> Artificial sequence
<220>
<223> Synthetic oligonucleotide
<400> 4
gctagatgtt agcgt
Please reduce the spaces between "Artificial" and "sequence" on the
<213> line. Another global error. Also, please insert the cumulative
nucleotide total.
<210> 6
<211> 15
<212> DNA
<213> Artificial sequence
<220>
<223> Synthetic oligonucleotide
<400> 6
gcatgacgtt gagct
 15
Pleaes move the "15" up to the nucleotide line.
<210> 8
<211> 20
<212> DNA
<213> Artificial sequence
<220>
<223> Synthetic oligonucleotide
```

tccatgagct tcctgagtct 20

Please: reduce the many blank lines between the <400> line and the nucleotide line; 2) move the "20" up to the nucleotide line. These types of errors appear globally.

<210> 14

<211> 15

<212> DNA

<213> Artificial sequence

<220>

<223> Synthetic oligonucleotide

<220>

```
<221> modified base
<222> (7)..(7)-
<223> m5c
<400> 14
```

gctagacgtt agcgt

Please remove the hyphen "-" after the last "7" on the <222> line. This type of error appears globally. Please insert the cumulative nucleotide total on the nucleotide line.

<400> 56
catttccacg atttccca
20
20
18

Please insert the cumulative total at the right margin of the nucleotide line.

Please remove the 4 lines of numbers above, which appear at the end of the submitted file.

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

## Validated By CRFValidator v 1.0.3

Application No: 10743625 Version No: 2.0

Input Set:

Output Set:

**Started:** 2008-06-06 11:01:51.857

**Finished:** 2008-06-06 11:02:52.167

**Elapsed:** 0 hr(s) 1 min(s) 0 sec(s) 310 ms

Total Warnings: 62

Total Errors: 84

No. of SeqIDs Defined: 56

Error code		Error Description
W	213	Artificial or Unknown found in <213> in SEQ ID (1)
E	254	The total number of bases conflicts with running total Input: 0, Calculated: 20 SEQID(1)
W	213	Artificial or Unknown found in <213> in SEQ ID (2)
E	254	The total number of bases conflicts with running total Input: 0, Calculated: 20 SEQID(2)
W	213	Artificial or Unknown found in <213> in SEQ ID (3)
E	321	No. of Bases conflict, this line has no nucleotides SEQID (3)
E	321	No. of Bases conflict, this line has no nucleotides SEQID (3)
E	254	The total number of bases conflicts with running total Input: 0, Calculated: 20 SEQID(3)
W	402	Undefined organism found in <213> in SEQ ID (4)
E	254	The total number of bases conflicts with running total Input: 0, Calculated: 15 SEQID(4)
W	402	Undefined organism found in <213> in SEQ ID (5)
W	402	Undefined organism found in <213> in SEQ ID (6)
E	254	The total number of bases conflicts with running total Input: 0, Calculated: 15 SEQID(6)
W	333	tabs used in amino acid numbering SEQID (6)
W	402	Undefined organism found in <213> in SEQ ID (7)
M	402	Undefined organism found in <213> in SEQ ID (8)
Е	254	The total number of bases conflicts with running total Input: 0, Calculated: 20 SEQID(8)

# Output Set:

**Started:** 2008-06-06 11:01:51.857 **Finished:** 2008-06-06 11:02:52.167

**Elapsed:** 0 hr(s) 1 min(s) 0 sec(s) 310 ms

Total Warnings: 62
Total Errors: 84
No. of SeqIDs Defined: 56

Error code		Error Description
E	323	Invalid/missing amino acid numbering SEQID (8) POS (1)
E	323	Invalid/missing amino acid numbering SEQID (8) at Protein (5)
W	333	tabs used in amino acid numbering SEQID (8)
W	402	Undefined organism found in <213> in SEQ ID (9)
W	402	Undefined organism found in <213> in SEQ ID (10)
W	402	Undefined organism found in <213> in SEQ ID (11)
W	402	Undefined organism found in <213> in SEQ ID (12)
W	402	Undefined organism found in <213> in SEQ ID (13)
E	254	The total number of bases conflicts with running total Input: 0, Calculated: 15 SEQID(13)
E	323	Invalid/missing amino acid numbering SEQID (13) POS (1)
E	321	No. of Bases conflict, this line has no nucleotides SEQID (13)
W	213	Artificial or Unknown found in <213> in SEQ ID (14)
E	257	Invalid sequence data feature in <221> in SEQ ID (14)
W	401	Unrecognized range formatin <222> in SEQID (14)
E	254	The total number of bases conflicts with running total Input: 0, Calculated: 15 SEQID(14)
W	213	Artificial or Unknown found in <213> in SEQ ID (15)
E	257	Invalid sequence data feature in <221> in SEQ ID (15)
E	257	Invalid sequence data feature in <221> in SEQ ID (15)
E	254	The total number of bases conflicts with running total Input: 0, Calculated: 15 SEQID(15)
W	213	Artificial or Unknown found in <213> in SEQ ID (16)
E	254	The total number of bases conflicts with running total Input: 0,

# Output Set:

**Started:** 2008-06-06 11:01:51.857

Finished: 2008-06-06 11:02:52.167

**Elapsed:** 0 hr(s) 1 min(s) 0 sec(s) 310 ms

Total Warnings: 62
Total Errors: 84

No. of SeqIDs Defined: 56

Error code		Error Description
W	213	Artificial or Unknown found in <213> in SEQ ID (17)
E	254	The total number of bases conflicts with running total Input: 0, Calculated: 20 SEQID(17)
W	213	Artificial or Unknown found in <213> in SEQ ID (18)
E	254	The total number of bases conflicts with running total Input: 0, Calculated: 20 SEQID(18)
W	213	Artificial or Unknown found in <213> in SEQ ID (19)
E	257	Invalid sequence data feature in <221> in SEQ ID (19)
E	257	Invalid sequence data feature in <221> in SEQ ID (19)
E	257	Invalid sequence data feature in <221> in SEQ ID (19)
E	254	The total number of bases conflicts with running total Input: 0, Calculated: 20 SEQID(19)
W	213	Artificial or Unknown found in <213> in SEQ ID (20)
E	257	Invalid sequence data feature in <221> in SEQ ID (20)
E	254	The total number of bases conflicts with running total Input: 0, Calculated: 20 SEQID(20)
E	323	Invalid/missing amino acid numbering SEQID (20) POS (1)
E	323	Invalid/missing amino acid numbering SEQID (20)at Protein (5)
E	321	No. of Bases conflict, this line has no nucleotides SEQID (20)
E	321	No. of Bases conflict, this line has no nucleotides SEQID (20)
E	321	No. of Bases conflict, this line has no nucleotides SEQID (20)
E	321	No. of Bases conflict, this line has no nucleotides SEQID (20)
W	213	Artificial or Unknown found in <213> in SEQ ID (21)
E	257	Invalid sequence data feature in <221> in SEQ ID (21)

# Output Set:

**Started:** 2008-06-06 11:01:51.857

Finished: 2008-06-06 11:02:52.167

**Elapsed:** 0 hr(s) 1 min(s) 0 sec(s) 310 ms

Total Warnings: 62
Total Errors: 84

No. of SeqIDs Defined: 56

Error code		Error Description
E	254	The total number of bases conflicts with running total Input: 0, Calculated: 20 SEQID(21)
W	213	Artificial or Unknown found in <213> in SEQ ID (22)
E	254	The total number of bases conflicts with running total Input: 0, Calculated: 20 SEQID(22)
W	213	Artificial or Unknown found in <213> in SEQ ID (23)
Ε	254	The total number of bases conflicts with running total Input: 0, Calculated: 20 SEQID(23)
W	213	Artificial or Unknown found in <213> in SEQ ID (24)
E	254	The total number of bases conflicts with running total Input: 0, Calculated: 20 SEQID(24)
W	213	Artificial or Unknown found in <213> in SEQ ID (25)
E	254	The total number of bases conflicts with running total Input: 0, Calculated: 20 SEQID(25)
W	213	Artificial or Unknown found in <213> in SEQ ID (26)
E	254	The total number of bases conflicts with running total Input: 0, Calculated: 20 SEQID(26) This error has occured more than 20 times, will not be displayed
W	213	Artificial or Unknown found in <213> in SEQ ID (27)
E	257	Invalid sequence data feature in <221> in SEQ ID (27)
W	401	Unrecognized range formatin <222> in SEQID (27)
W	213	Artificial or Unknown found in <213> in SEQ ID (28)
E	257	Invalid sequence data feature in <221> in SEQ ID (28)
W	213	Artificial or Unknown found in <213> in SEQ ID (29)
W	213	Artificial or Unknown found in <213> in SEQ ID (30) This error has occured more than 20 times, will not be displayed
E	257	Invalid sequence data feature in <221> in SEQ ID (33)

# Output Set:

**Started:** 2008-06-06 11:01:51.857

Finished: 2008-06-06 11:02:52.167

**Elapsed:** 0 hr(s) 1 min(s) 0 sec(s) 310 ms

Total Warnings: 62
Total Errors: 84

No. of SeqIDs Defined: 56

Error code		Error Description
E	257	Invalid sequence data feature in <221> in SEQ ID (34)
W	402	Undefined organism found in <213> in SEQ ID (39)
W	402	Undefined organism found in <213> in SEQ ID (40)
W	402	Undefined organism found in <213> in SEQ ID (41)
W	402	Undefined organism found in <213> in SEQ ID (42)
W	402	Undefined organism found in <213> in SEQ ID (43)
E	321	No. of Bases conflict, this line has no nucleotides SEQID (43)
E	355	Empty lines found between the amino acid numbering and the
E	321	No. of Bases conflict, this line has no nucleotides SEQID (43)
E	355	Empty lines found between the amino acid numbering and the
E	321	No. of Bases conflict, this line has no nucleotides SEQID (43)
W	402	Undefined organism found in <213> in SEQ ID (44)
W	402	Undefined organism found in <213> in SEQ ID (45)
W	402	Undefined organism found in <213> in SEQ ID (46)
W	402	Undefined organism found in <213> in SEQ ID (47)
W	402	Undefined organism found in <213> in SEQ ID (48) This error has occured more than 20 times, will not be displayed
E	323	Invalid/missing amino acid numbering SEQID (48) POS (1)
E	321	No. of Bases conflict, this line has no nucleotides SEQID (48)
E	321	No. of Bases conflict, this line has no nucleotides SEQID (48)
E	257	Invalid sequence data feature in <221> in SEQ ID (52)
W	401	Unrecognized range formatin <222> in SEQID (52)
E	257	Invalid sequence data feature in <221> in SEQ ID (53)

## Output Set:

**Started:** 2008-06-06 11:01:51.857 **Finished:** 2008-06-06 11:02:52.167

**Elapsed:** 0 hr(s) 1 min(s) 0 sec(s) 310 ms

Total Warnings: 62
Total Errors: 84

No. of SeqIDs Defined: 56
Actual SeqID Count: 56

Ε

321

Error code	Error Description
W 401	Unrecognized range formatin <222> in SEQID (53)
E 323	Invalid/missing amino acid numbering SEQID (56) POS (1)
E 323	Invalid/missing amino acid numbering SEQID (56)at Protein (5)
E 321	No. of Bases conflict, this line has no nucleotides SEQID (56)
E 321	No. of Bases conflict, this line has no nucleotides SEQID (56)

No. of Bases conflict, this line has no nucleotides SEQID (56)

```
SEQUENCE LISTING
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Kline, Joel N
<120> IMMUNOSTIMULATORY NUCLEIC ACID MOLECULES
<130> C1039.70073US00
<140> 10743625
<141> 2003-12-22
<150> US 08/276,358
<151> 1994-07-15
<150> US 08/386,063
<151> 1995-02-07
<150> US 08/738,652
<151> 1996-10-30
<150> US 09/818,918
<151> 2001-03-27
<160> 56
<170> PatentIn version 3.3
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atggaaggtc cagtgttctc
<210> 2
<211> 20
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<220>
<223> Synthetic oligonucleotide
<400> 2
atcgacctac gtgcgttctc
<210> 3
<211> 20
<212> DNA
<213> Artificial sequence
```

```
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<223> Synthetic oligonucleotide
20
20
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20
tccataacgt tcctgatgct
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<212> DNA
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<223> Synthetic oligonucleotide
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<212> DNA
<213> Artificial sequence
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<223> Synthetic oligonucleotide
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15
<210> 7
<211> 20
<212> DNA
<213> Artificial sequence
<220>
<223> Synthetic oligonucleotide
<400> 7
tccatgacgt tcctgatgct 20
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<211> 20
<212> DNA
<213> Artificial sequence
<220>
<223> Synthetic oligonucleotide
<400> 8
```

```
20
3
<210> 9
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<211> 20
<212> DNA
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<223> Synthetic oligonucleotide
<400> 10
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<210> 11
<211> 21
<212> DNA
<213> Artificial sequence
<220>
<223> Synthetic oligonucleotide
<400> 11
tccatgagct tcctgagtgc t 21
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<211> 20
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<213> Artificial sequence
<220>
<223> Synthetic oligonucleotide
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<210> 13

tccatgagct tcctgagtct

```
gctagacgtt agcgt
15
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<223> m5c
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<212> DNA
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<223> Synthetic oligonucleotide
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<211> 15 <212> DNA

<400> 13

<213> Artificial sequence

<223> Synthetic oligonucleotide

```
<220>
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<223> m5c
<400> 15
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<210> 16
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<212> DNA
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<223> Synthetic oligonucleotide
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gcatgacgtt gagct
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15
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atggaaggtc cagcgttctc
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atcgactctc gagcgttctc
<210> 19
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<220>
<223> Synthetic oligonucleotide
```

```
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<221> modified base
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<223> Synthetic oligonucleotide
<220>
<221> modified base
<222> (3)..(3)
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<400> 20
atcgactctc gagcgttctc
20
20
20
20
<210> 21
<211> 20
<212> DNA
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<220>
<223> Synthetic oligonucleotide
<220>
<221> modified base
<222> (18)..(18)
<223> m5c
<400> 21
atcgactctc gagcgttctc
```

```
<212> DNA
<213> Artificial sequence
<220>
<223> Synthetic oligonucleotide
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<211> 20
<212> DNA
<213> Artificial sequence
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<223> Synthetic oligonucleotide
<400> 23
gagaacgctg gaccttccat
<210> 24
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<212> DNA
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<220>
<223> Synthetic oligonucleotide
<400> 24
gagaacgctc gaccttccat
<210> 25
<211> 20
<212> DNA
<213> Artificial sequence
20
20
20
20
<220>
<223> Synthetic oligonucleotide
<400> 25
gagaacgctc gaccttcgat
<210> 26
<211> 20
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<210> 22 <211> 20

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gagaacgctg gaccttccat
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<222> (14)..(14)
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<400> 28
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<210> 29
<211> 20
<212> DNA
<213> Artificial sequence
20
20
20
20
<220>
-8
<223> Synthetic oligonucleotide
```

<400> 29

```
gagaacgatg gaccttccat
```

```
<210> 30
<211> 20
<212> DNA
<213> Artificial sequence
<220>
<223> Synthetic oligonucleotide
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gagaacgctc cagcactgat
<210> 31
<211> 20
<212> DNA
<213> Artificial sequence
<220>
<223> Synthetic oligonucleotide
<400> 31
tccatgtcgg tcctgatgct
<210> 32
<211> 20
<212> DNA
<213> Artificial sequence
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<223> Synthetic oligonucleotide
<400> 32
tccatgctgg tcctgatgct
<210> 33
<211> 20
<212> DNA
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<223> Synthetic oligonucleotide
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tccatgtcgg tcctgatgct

```
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20
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<220>
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20
20
20
-10
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<223> Synthetic oligonucleotide
<400> 43
20
20
```

-11

tccatgtcgt tcctgatgct

```
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<220>
<223> Synthetic oligonucleotide
<400> 46
tccatgacgt ccctgatgct 20
<210> 47
<211> 20
<212> DNA
<213> Artificial sequence
<220>
<223> Synthetic oligonucleotide
<400> 47
tccatcacgt gcctgatgct 20
<210> 48
<211> 15
```

```
gcatgacgtt gagct
15
20
20
<210> 49
<211> 15
<212> DNA
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ggggtcaagt ctgaggggg
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<212> DNA

<220>

<400> 48

<213> Artificial sequence

<223> Synthetic oligonucleotide

```
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<400> 51
gctagacgtt agtgt
<210> 52
<211> 15
<212> DNA
<213> Artificial sequence
<220>
<223> Synthetic oligonucleotide
<220>
<221> modified base
<222> (8)..(8)-
<223> m5c
<400> 52
gctagacctt agtgt
<210> 53
<211> 20
<212> DNA
<213> Artificial sequence
15
20
15
15
-13
<220>
<223> Synthetic oligonucleotide
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<221> modified base
<222> (8)..(8)-
<223> m5c
<400> 53
tccatgtcgt tcctgatgct
<210> 54
<211> 20
<212> DNA
<213> Artificial sequence
```

<210> 51

```
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<210> 55
<211> 18
<212> DNA
<213> Artificial sequence
<220>
<223> Synthetic oligonucleotide
<400> 55
tctcccagcg tgcgccat
<210> 56
<211> 18
<212> DNA
<213> Artificial sequence
<220>
<223> Synthetic oligonucleotide
<400> 56
catttccacg atttccca
20
20
18
18
```